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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/561,401

01/30/2006

Ilkka Naatti

TAMPPAT-17

1100

36528 7590 09/18/2008

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EXAMINER

CAMPOS, JR., JUAN J

ART UNIT

PAPER NUMBER

3654

MAIL DATE

DELIVERY MODE

09/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/561,401	Applicant(s) NAATTI ET AL.	
	Examiner Juan J. Campos	Art Unit 3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-37, 39, 40, 43-45, 47 and 49-51 is/are rejected.
- 7) ☒ Claim(s) 38, 41, 42, 46 and 48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: Specification has not been corrected to include the new drawing 12 (see new drawing 12 and second paragraph of the current remarks) in the second sentence in paragraph [0032].

Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. **Regarding claim 34**, the phrase "i.e." renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

3. **Claim 34** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 34 claims a "preliminary reeling station". The specification does not disclose a "preliminary reeling station". For this office action, the preliminary reeling station will be consider the same item as primary reeling device.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

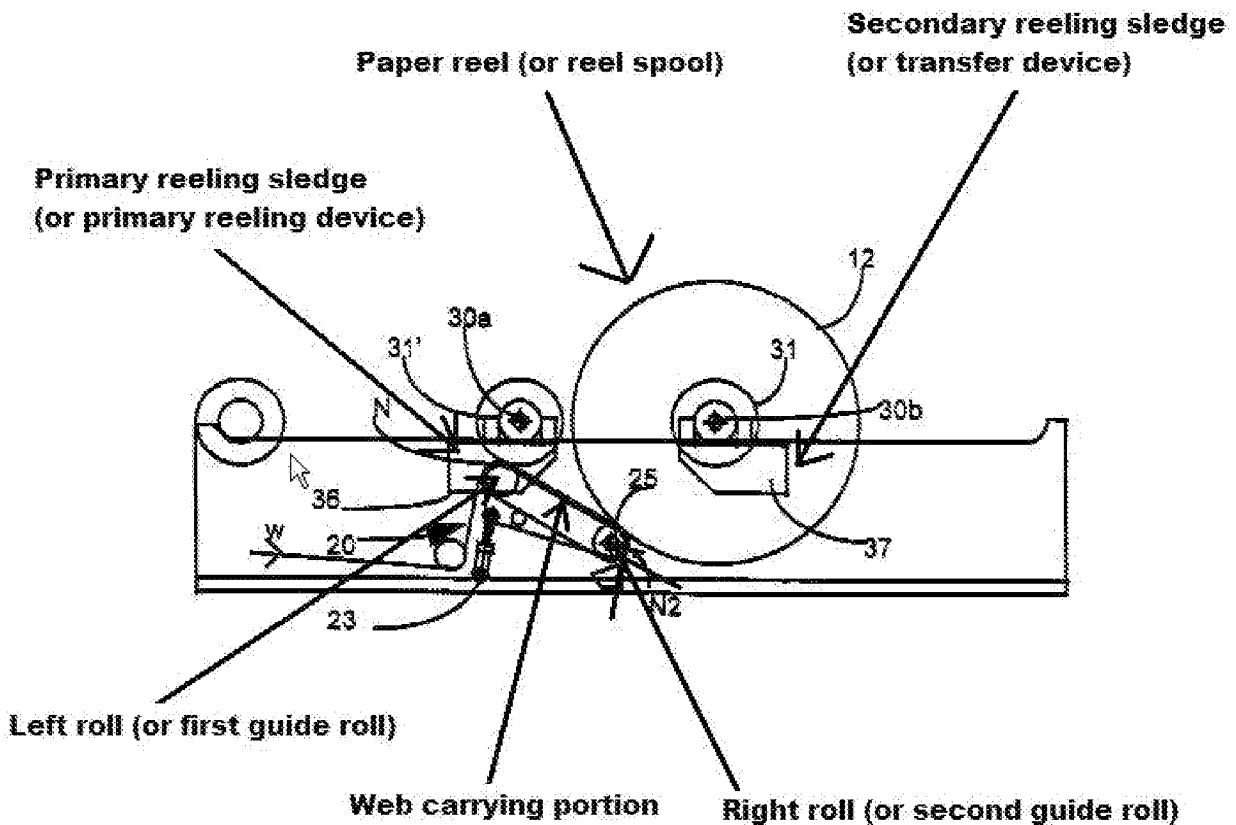
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 34-37, 39, 44-45 and 47 are rejected under 35 U.S.C. 102(b) as being anticipated by Veräjäkörva et al. (US Patent 5,918,830).**

6. **Regarding claim 44**, Veräjäkörva (from here on just referred to as Verajakorva) discloses a reeling device and method in reeling of a paper web or equivalent that comprises a paper reel 12 (or reel spool having a spool axis, see figure a-d), and a primary reeling carriage sledge 36 (or primary reeling device) arranged to receive the paper reel, a belt (no number, see figures 1a-d, or supporting member) having an endless loop and inside the endless loop with a set of belt rolls (no numbers for the rolls, again see figures 1a-d) with at least a first roll (the left roll, or first guide roll) and a second roll (the right roll, or second guide roll), the endless loop having an upper web-carrying portion (no number) arranged to be driven in a machine direction (see belt in figure 1c) where the upper web-carrying portion forms a nip (see the nip between the paper reel 12 and left roll in belt in figure 1b), a nip positioned where the web W first joins the paper reel (see the nip in figures 1b-c) where the left roll (or first guide roll) is arranged so as to engage the paper reel with the web and the belt (with endless loop) there between before any other roll engages the paper reel and where the left roll (or first guide roll) is arranged to begin the reeling of the web on to the paper reel (or reel spool), further where the left roll (or first guide roll) is mounted for motion from a first position in nipping engagement with the paper reel (see figure 1b) to a second position against the incoming direction of the web (this second position occurs as the left-first guide roll is lowered by the hydraulic cylinder 23. Since the left-first guide roll does not move in a completely vertical direction, the left-first roll thus moves against the incoming

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direction of the web, as the cylinder lowers that roll), a secondary reeling sledge 37 (or transfer device) is mounted for motion in the machine direction, and arranged to receive the paper reel 12 (or reel spool) from the primary reeling carriage sledge 36 (or primary reeling device) and move the paper reel 12 (or reel spool) in the machine direction so that the outer periphery of the paper reel remains in engagement with the endless loop during reeling of the paper on to the paper reel 12 (or reel spool). Also, see column 4 lines 59 through column 5 lines 67, and figure below.



Regarding claim 34, Verajakorva discloses a reeling device as discussed above in regarding claim 44. With the Verajakorva device above one can develop the method of reeling a paper web that comprise the steps of: bringing the web in an incoming

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direction to the paper reel 12 (or reel spool), and reeling the web on to the paper reel 12 (or reel spool) to form a machine reel of increasing diameter in a primary reeling carriage sledge 36 (or a preliminary reeling station), the machine reel having a periphery and a peripheral direction defined as extending along the periphery of the machine reel, passing the web through a nip formed between an endless loop of the belt (or support member) and the machine reel (see figures 1a-d), wherein the endless loop (of the belt) is supported between the left roll (or a first guide roll) and the right roll (or a second guide roll) inside the endless loop where the left roll (or first guide roll) is positioned spaced against the incoming direction from the right roll (or second guide roll) where the paper web W first contacts the paper reel 12 (or reel spool) or machine reel while the web is engaged with the endless loop, wherein the left roll (or first guide roll) is defined as the roll which first comes into nipping engagement with the paper reel 12 (or reel spool), with the web and endless loop of the belt (or support member) there between, and wherein the left roll (or first guide roll) begins the reeling of the web on to the paper reel 12 (or reel spool) to form the machine reel, as the machine reel increases in diameter while still in the primary reeling carriage sledge 36 (or preliminary reeling station), moving an central axis defined by the left roll (or first guide roll) in the peripheral direction and against the incoming direction (this second position occurs as the left-first guide roll is lowered by the hydraulic cylinder 23. Since the left-first guide roll does not move in a completely vertical direction, the left-first roll thus moves against the incoming direction of the web, as the cylinder lowers that roll), and transferring the machine reel away from the primary reeling carriage sledge 36 preliminary reeling

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station in the incoming direction i.e., a machine direction, in a secondary reeling sledge 37 (or transfer device) forming a secondary reeling station (the location of the secondary reeling sledge when paper reel has transfer the secondary reeling sledge, see figure 1d), the secondary reeling sledge (or transfer device) mounted for motion in the incoming direction so that the machine reel continues to form the nip through which the web passes until reeling of the machine reel is finished. The method of operating the apparatus is well known and no new, non-obvious or improvement claims are described by the method claim since all elements of the Verajakorva apparatus are disclosed in detail above. Also, see column 4 lines 59 through column 5 lines 67 and figure above.

7. **Regarding claim 35**, Verajakorva discloses a reeling device and method(s) as discussed above in regarding claims 44 and 34. The method(s) of reeling a paper web to further comprise the step of moving the left roll (or first guide roll) in the peripheral direction and against the incoming direction so that the left roll (or first guide roll) moves from a first position (the position shown on figure 1b) where the first guide roll initially engages the belt (or support member) against the machine reel at the nip, to a position (the position of the roll has after the hydraulic cylinder 23 lowers the roll and the primary reeling sledge has moved further right of that roll, not shown) further away from the machine reel, so that the machine reel is first formed with a hard nip (figure 1b), and after movement of the first guide roll (and sledge 36) the machine roll is formed with a nip (see nip on figure 1c) which is softer than the hard nip while still in the preliminary reeling station (or sledge 36).

8. **Regarding claim 36**, Verajakorva discloses a reeling device and method(s) as discussed above in regarding claims 44 and 34-35. The method(s) above can further comprise the step where the axis of the left roll (or first guide roll) and axis of the paper reel 12 define a plane that is vertical. This step occurs just as the primary reeling device (or sledge 36) passes by the left roll, not shown.

9. **Regarding claim 37**, Verajakorva discloses a reeling device and method(s) as discussed above in regarding claims 44 and 34. The method(s) above can further comprise the step where the paper reel (or reel spool) is in a stationary position (see figure 1c) during the reeling in the preliminary reeling station (or sledge 36).

10. **Regarding claim 39**, Verajakorva discloses a reeling device and method(s) as discussed above in regarding claims 44 and 34. The method(s) above can further comprise the step where the left roll (or first guide roll) and right roll (or second guide roll) are both moved against the incoming direction (by the movement of the hydraulic cylinder 23) so that the position of the endless loop of the support member also moves in the direction against the incoming direction of the web. This movement occurs because the movement of the belt is not completely vertical. So, as the belt is lowered from its position on figure 1c, the belt will be moved in a direction against the direction of the web.

11. **Regarding claim 45**, Verajakorva discloses a reeling device and method(s) as discussed above in regarding claim 44, Verajakorva further shows that the left roll (or first guide roll) has an axis (no number) movable linearly at least in the machine

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direction (this movement is the movement of the roll as the hydraulic cylinder 32 is raised up since the left roll does not move only vertically), see figures 1a-d.

12. **Regarding claim 47**, Verajakorva discloses a reeling device and method(s) as discussed above in regarding claim 44, Verajakorva further shows that the secondary reeling sledge 37 (or transfer device) is mounted for motion in the machine direction on rails 13, see figures 1a-d.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. **Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Veräjälä et al. (US Patent 5,918,830) in view of Saukkonen (US Patent 4,842,209).**

15. **Regarding claim 40**, Verajakorva discloses a reeling device and methods as discussed above in regarding claims 44, 34 and 39. Verajakorva does not disclose the step as discussed in claim 40. Saukkonen discloses a method and device in the winding of a web that comprise first roll 18 (or first guide roll) and a second roll 19 (or second guide roll) are connected in a rigid body (with fastening pieces 24 and 25) by two lever arms 21 and 22. At the time of the invention, it would have been obvious to a

person of ordinary skill in this art to connect the two belt rolls 20 (of Verajakorva), as taught by Saukkonen, into a rigid body. The motivation for the combination would be to follow the teaching of Saukkonen.

16. Claims 43 and 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Veräjäkorva et al. (US Patent 5,918,830) in view of Möller et al. (US Patent 6, 311,921).

17. Regarding claims 43 and 49, a reeling device and methods as discussed above in regarding claims 44 and 34. Verajakorva does not disclose the subject matter as discussed in claim 43 and 49-51. Möller et al. (from here on just referred to as Moller) discloses a winding device and method comprising a carrying drum (12, or first guide roll), discharge roll (42) and third guide roll (76) inside a perforated belt (see figure 2, column 10 lines 62-67 and column 13 lines 1-12). At the time of the invention, it would have been obvious to a person of ordinary skill in this art to substitute the third guide roll (76) in the inside the endless loop of the belt (of Verajakorva) against the incoming web direction and where the endless loop contact the paper reel between the first guide roll and second guide roll. Also, the substitution would allow the third roll to be located as discussed in claim 49. Verajakorva further discloses that the right roll (or second guide roll) is fixed (see column 5 lines 64-67 and figures 1a-d). In addition, the third guide roll (76) would be adjustable to adjust the tension of the belt, as taught by Moller. The motivation for the combination would be to provide an extra guide roll for the web before the web is reeled to the paper reel 12 and first guide roll.

Allowable Subject Matter

18. Claims 38, 41, 42, 46, 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan J. Campos whose telephone number is (571) 270-5229. The examiner can normally be reached on 9am-4pm (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Cuomo can be reached on (571) 272-6856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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JJC

/Peter M. Cuomo/

Supervisory Patent Examiner, Art Unit 3654